

**Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)**

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  

Although claims 57-64 and 73-76 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)**

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

PCT/IB 03583

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D403/04 C07D495/04 C07D513/04 A61K31/55 A61P25/18

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, CHEM ABS Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
E	WO 03 082877 A (TUPPER DAVID EDWARD ;KRUSHINSKI JOSEPH HERMAN JR (US); PINEIRO-NUN) 9 October 2003 (2003-10-09) claim 1	1-84
X	US 5 824 676 A (TEHIM ASHOK ET AL) 20 October 1998 (1998-10-20) claim 1	1-84
	--- -/--	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

28 October 2003

Date of mailing of the international search report

04/11/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Wörth, C

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	CHAKRABARTI J K ET AL: "EFFECTS OF CONFORMATIONALLY RESTRICTED 4-PIPERAZINYL-10H-THIENOBENZODIAZEPINE NEUROLEPTICS ON CENTRAL DOPAMINERGIC AND CHOLINERGIC SYSTEMS" JOURNAL OF MEDICINAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY. WASHINGTON, US, vol. 25, no. 10, 1 October 1982 (1982-10-01), pages 1133-1140, XP000561449 ISSN: 0022-2623 table 1, compounds 10-12; page 1134, left hand column, first paragraph ---	1-84
Y	EP 0 354 781 A (LILLY INDUSTRIES LTD) 14 February 1990 (1990-02-14) claims 1-3 ---	1-84
Y	US 5 602 121 A (FU JIAN-MIN) 11 February 1997 (1997-02-11) claims 1,2 ---	1-84
A	EP 1 016 664 A (YOSHITOMI PHARMACEUTICAL) 5 July 2000 (2000-07-05) claim 1 ---	1-84
A	US 4 115 568 A (CHAKRABARTI JIBAN KUMAR ET AL) 19 September 1978 (1978-09-19) claim 1 -----	1-84

## INTERNATIONAL SEARCH REPORT

PCT/IB/03583

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 03082877	A	09-10-2003	WO 03082877 A1	09-10-2003
US 5824676	A	20-10-1998	US 5602124 A	11-02-1997
			AU 3934895 A	03-07-1996
			CA 2207613 A1	20-06-1996
			WO 9618629 A1	20-06-1996
EP 0354781	A	14-02-1990	AT 113600 T	15-11-1994
			AU 625067 B2	02-07-1992
			AU 3939989 A	15-02-1990
			CA 1318669 C	01-06-1993
			CN 1040798 A ,B	28-03-1990
			DE 68919154 D1	08-12-1994
			DE 68919154 T2	09-03-1995
			DK 393489 A	12-02-1990
			EP 0354781 A2	14-02-1990
			ES 2062012 T3	16-12-1994
			HU 53109 A2	28-09-1990
			IE 64598 B1	23-08-1995
			IL 91246 A	25-01-1994
			JP 2104591 A	17-04-1990
			JP 2779219 B2	23-07-1998
			KR 138527 B1	15-05-1998
			MX 17107 A	01-08-1993
			NZ 230251 A	26-05-1992
			NZ 240501 A	26-05-1992
			PH 27010 A	01-02-1993
			PT 91401 A ,B	08-03-1990
			RU 2002752 C1	15-11-1993
			US 4977150 A	11-12-1990
			US 5051516 A	24-09-1991
			ZA 8906039 A	24-04-1991
US 5602121	A	11-02-1997	AU 3934595 A	03-07-1996
			CA 2207771 A1	20-06-1996
			WO 9618621 A1	20-06-1996
			US 5834459 A	10-11-1998
EP 1016664	A	05-07-2000	AT 244245 T	15-07-2003
			AU 739385 B2	11-10-2001
			AU 8889098 A	22-03-1999
			BR 9814042 A	03-10-2000
			CA 2302409 A1	11-03-1999
			DE 69816102 D1	07-08-2003
			EP 1016664 A1	05-07-2000
			HU 0003718 A2	28-09-2001
			JP 3156933 B2	16-04-2001
			NO 20001049 A	03-04-2000
			NZ 503484 A	26-10-2001
			US 6271225 B1	07-08-2001
			CN 1268949 T	04-10-2000
			WO 9911647 A1	11-03-1999
			JP 2001072684 A	21-03-2001
			RU 2197491 C2	27-01-2003
			US 2002042411 A1	11-04-2002
US 4115568	A	19-09-1978	GB 1533235 A	22-11-1978
			AR 221203 A1	15-01-1981

## INTERNATIONAL SEARCH REPORT

PCT/IB 03583

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4115568	A	AT 351547 B	25-07-1979
		AT 898275 A	15-01-1979
		AU 506340 B2	20-12-1979
		AU 8685875 A	26-05-1977
		BE 835932 A1	25-05-1976
		BG 29573 A3	12-12-1980
		CA 1075687 A1	15-04-1980
		CH 613455 A5	28-09-1979
		CH 613454 A5	28-09-1979
		CS 236753 B2	15-05-1985
		DD 123343 A5	12-12-1976
		DE 2552403 A1	12-08-1976
		DK 375479 A ,B,	07-09-1979
		DK 524175 A ,B,	27-05-1976
		ES 443011 A1	01-07-1977
		FR 2292479 A1	25-06-1976
		HK 58681 A	04-12-1981
		HU 172493 B	28-09-1978
		IE 42565 B1	10-09-1980
		IE 42564 B1	10-09-1980
		IL 48502 A	31-01-1980
		IL 54634 A	31-01-1980
		JP 1317931 C	29-05-1986
		JP 51076296 A	01-07-1976
		JP 60044314 B	02-10-1985
		KE 3163 A	16-10-1981
		MY 14982 A	31-12-1982
		NL 7513833 A ,B,	31-05-1976
		NZ 179335 A	13-11-1978
		NZ 185594 A	13-11-1978
		PH 11669 A	19-05-1978
		PH 24534 A	03-08-1990
		PL 100135 B1	30-09-1978
		RO 69912 A1	15-08-1980
		SE 421209 B	07-12-1981
		SE 7513185 A	28-05-1976
		SE 429045 B	08-08-1983
		SE 7812194 A	27-11-1978
		SU 629879 A3	25-10-1978
		SU 626702 A3	30-09-1978
		US 4172831 A	30-10-1979
		US 4115574 A	19-09-1978
		YU 123482 A1	31-10-1982
		YU 298375 A1	31-10-1982
		ZA 7507344 A	24-11-1976